1

SEQUENCE LISTING

<110> KISELEV, VSEVOLOD I
      PETR, SVESHNIKOV G

<120> METHODS, KITS, AND COMPOSITIONS FOR THE DEVELOPMENT AND
      USE OF MONOCLONAL ANTIBODIES SPECIFIC TO ANTIGENS
      TRADITIONALLY OF LOW IMMUNOGENICITY

<130> 16631.0001

<140> 10/573,478
<141> 2006-03-24

<150> PCT/RU2004/000373
<151> 2004-09-24

<150> RU 2003128660
<151> 2003-09-25

<160> 22

<170> PatentIn Ver. 3.3

<210> 1
<211> 309
<212> DNA
<213> Human papillomavirus type 16

<220>
<221> CDS
<222> (7)..(303)

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gaattc atc atg cat gga gat aca cct aca ttg cat gaa tat atg tta   48
       Ile Met His Gly Asp Thr Pro Thr Leu His Glu Tyr Met Leu
        1   5   10

gat ttg caa cca gag aca act gat ctc tac tgt tat gag caa tta aat   96
Asp Leu Gln Pro Glu Thr Thr Asp Leu Tyr Cys Tyr Glu Gln Leu Asn
 15   20   25   30

gac agc tca gag gag gag gat gaa ata gat ggt cca gct gga caa gca   144
Asp Ser Ser Glu Glu Glu Asp Glu Ile Asp Gly Pro Ala Gly Gln Ala
                35   40   45

gaa ccg gac aga gcc cat tac aat att gta acc ttt tgt tgc aag tgt   192
Glu Pro Asp Arg Ala His Tyr Asn Ile Val Thr Phe Cys Cys Lys Cys
                50   55   60

gac tct acg ctt cgg ttg tgc gta caa agc aca cac gta gac att cgt   240
Asp Ser Thr Leu Arg Leu Cys Val Gln Ser Thr His Val Asp Ile Arg
            65   70   75

act ttg gaa gac ctg tta atg ggc aca cta gga att gtg tgc ccc atc   288
Thr Leu Glu Asp Leu Leu Met Gly Thr Leu Gly Ile Val Cys Pro Ile
        80   85   90

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tgt tct cag aaa cca ggatcc                                        309
Cys Ser Gln Lys Pro
 95
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<210> 2
<211> 99
<212> PRT
<213> Human papillomavirus type 16
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Ile Met His Gly Asp Thr Pro Thr Leu His Glu Tyr Met Leu Asp Leu
 1               5                  10                  15

Gln Pro Glu Thr Thr Asp Leu Tyr Cys Tyr Glu Gln Leu Asn Asp Ser
            20                  25                  30

Ser Glu Glu Glu Asp Glu Ile Asp Gly Pro Ala Gly Gln Ala Glu Pro
        35                  40                  45

Asp Arg Ala His Tyr Asn Ile Val Thr Phe Cys Cys Lys Cys Asp Ser
    50                  55                  60

Thr Leu Arg Leu Cys Val Gln Ser Thr His Val Asp Ile Arg Thr Leu
 65                  70                  75                  80

Glu Asp Leu Leu Met Gly Thr Leu Gly Ile Val Cys Pro Ile Cys Ser
                85                  90                  95

Gln Lys Pro
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<210> 3
<211> 330
<212> DNA
<213> Human papillomavirus type 18
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<220>
<221> CDS
<222> (7)..(324)
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<400> 3
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       Ser Met His Gly Pro Lys Ala Thr Leu Gln Asp Ile Val Leu
        1               5                  10

cat tta gag ccc caa aat gaa att ccg gtt gac ctt cta tgt cac gag   96
His Leu Glu Pro Gln Asn Glu Ile Pro Val Asp Leu Leu Cys His Glu
 15                  20                  25                  30

caa tta agc gac tca gag gaa gaa aac gat gaa ata gat gga gtt aat  144
Gln Leu Ser Asp Ser Glu Glu Glu Asn Asp Glu Ile Asp Gly Val Asn
                35                  40                  45

cat caa cat tta cca gcc cga cga gct gaa cca caa cgt cac aca atg  192
His Gln His Leu Pro Ala Arg Arg Ala Glu Pro Gln Arg His Thr Met
                50                  55                  60
```

```
ttg tgt atg tgt tgt aag tgt gaa gcc aga att gag cta gta gta gaa    240
Leu Cys Met Cys Cys Lys Cys Glu Ala Arg Ile Glu Leu Val Val Glu
            65                  70                  75

agc tca gca gac gac ctt cga gca ttc cag cag ctg ttt ctg aac acc    288
Ser Ser Ala Asp Asp Leu Arg Ala Phe Gln Gln Leu Phe Leu Asn Thr
        80                  85                  90

ctg tcc ttt gtg tgt ccg tgg tgt gca tcc cag cag ggatcc            330
Leu Ser Phe Val Cys Pro Trp Cys Ala Ser Gln Gln
 95                 100                 105
```

<210> 4
<211> 106
<212> PRT
<213> Human papillomavirus type 18

<400> 4
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 1               5                  10                  15

Glu Pro Gln Asn Glu Ile Pro Val Asp Leu Leu Cys His Glu Gln Leu
                20                  25                  30

Ser Asp Ser Glu Glu Glu Asn Asp Glu Ile Asp Gly Val Asn His Gln
            35                  40                  45

His Leu Pro Ala Arg Arg Ala Glu Pro Gln Arg His Thr Met Leu Cys
        50                  55                  60

Met Cys Cys Lys Cys Glu Ala Arg Ile Glu Leu Val Val Glu Ser Ser
 65                 70                  75                  80

Ala Asp Asp Leu Arg Ala Phe Gln Gln Leu Phe Leu Asn Thr Leu Ser
                85                  90                  95

Phe Val Cys Pro Trp Cys Ala Ser Gln Gln
            100                 105
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<210> 5
<211> 5321
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic nucleotide
      sequence of recombinant vector pQE30-dnaK

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ggatcgcatc accatcacca tcacggatcc gctcgtgcgg tcgggatcga cctcgggacc 180
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ggctccagga ccacccgtc aattgtcgcg ttcgcccgca acggtgaggt gctggtcggc 300
cagcccgcca agaaccaggc agtgaccaac gtcgatcgca ccgtgcgctc ggtcaagcga 360
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gcacatttcc ccgaaaagtg ccacctgacg tctaagaaac cattattatc atgacattaa 5280
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<211> 12
<212> PRT
<213> Bos taurus

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Lys Lys Arg Pro Lys Pro Gly Gly Gly Trp Asn Thr
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<210> 7
<211> 8
<212> PRT
<213> Bos taurus

<400> 7
Gln Pro His Gly Gly Gly Trp Gly
  1               5


<210> 8
<211> 13
<212> PRT
<213> Bos taurus

<400> 8
Gln Trp Asn Lys Pro Ser Lys Pro Lys Thr Asn Ile Lys
  1               5                   10
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<210> 9
<211> 17
<212> PRT
<213> Bos taurus

<400> 9
Ile Thr Gln Tyr Gln Arg Glu Ser Gln Ala Tyr Tyr Gln Arg Gly Ala
  1   5   10   15

Ser

<210> 10
<211> 19
<212> DNA
<213> Human papillomavirus type 16

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<210> 11
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<213> Human papillomavirus type 16

<400> 11
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<210> 12
<211> 20
<212> DNA
<213> Human papillomavirus type 18

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gcgactcaga ggaagaaaac   20

<210> 13
<211> 20
<212> DNA
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<210> 14
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<210> 17
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<210> 18
<211> 130
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic pHE716 and
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<220>
<221> misc_feature
<222> (107)..(108)
<223> HSP 16/HSP18 E7 gene insertion site

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<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      primer

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<210> 20
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<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      primer

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cgggatcctg gtttctgaga acagatgg                               28


<210> 21
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<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      primer

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gaagatctat gcatggacct aaggcaac                               28


<210> 22
<211> 28
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      primer

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